

IN THE SPECIFICATION

Please amend the second paragraph of page 8 as follows:

In addition to signal processing, DSP **27** also functions as a data pump. Microcontroller **22** provides attention commands (AT commands) decoding and call progress monitoring and may employ, for example, a 4-bit program word and an 8-bit data word. Clock interface **28** includes a clock generator that accepts a high-frequency (e.g., 4.9152 MHz) master clock input. Clock interface **28** also generates all the modem sample rates for supporting the modem standards designed into system-side line-isolation module **21**. In addition, the clock generator within clock interface **28** provides a 9.6 kHz rate for audio playback.

Please amend the equation in the second paragraph of page 9 as follows:

If modem **17** from Figure 1 is to be utilized as a receiving modem, then an adaptive equalizer needs to be provided within modem **17**. Such adaptive equalizer is preferably implemented in software or firmware to be executed by DSP **27** within modem **17**. In addition, a training procedure needs to be performed on the adaptive equalizer before modem **17** should receive data from a sending modem, such as modem **12** from Figure 1. Basically, the training procedure generates approximately 40 to 60 coefficients for the adaptive equalizer in order to ensure that modem **17** can compensate for the impairments on a telephone line between modem **17** and modem **12** during data transmissions. The coefficients for the adaptive equalizer can be generated by the following equation:

$$w_n(k+1) = w_n(k) + \frac{0.1}{\delta(r_k)} * e(k) * r(k-n)$$

where r_k = input sample

$\delta(r_k)$ = input power of input sample

w_n = equalizer coefficients

$e(k)$ = error between ideal symbol and equalizer output

n = index of equalizer coefficients

k = time index